

# New York State Department of Environmental Conservation

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# Transplant Program Raritan Bay



**Tagged For Cleansing Only**

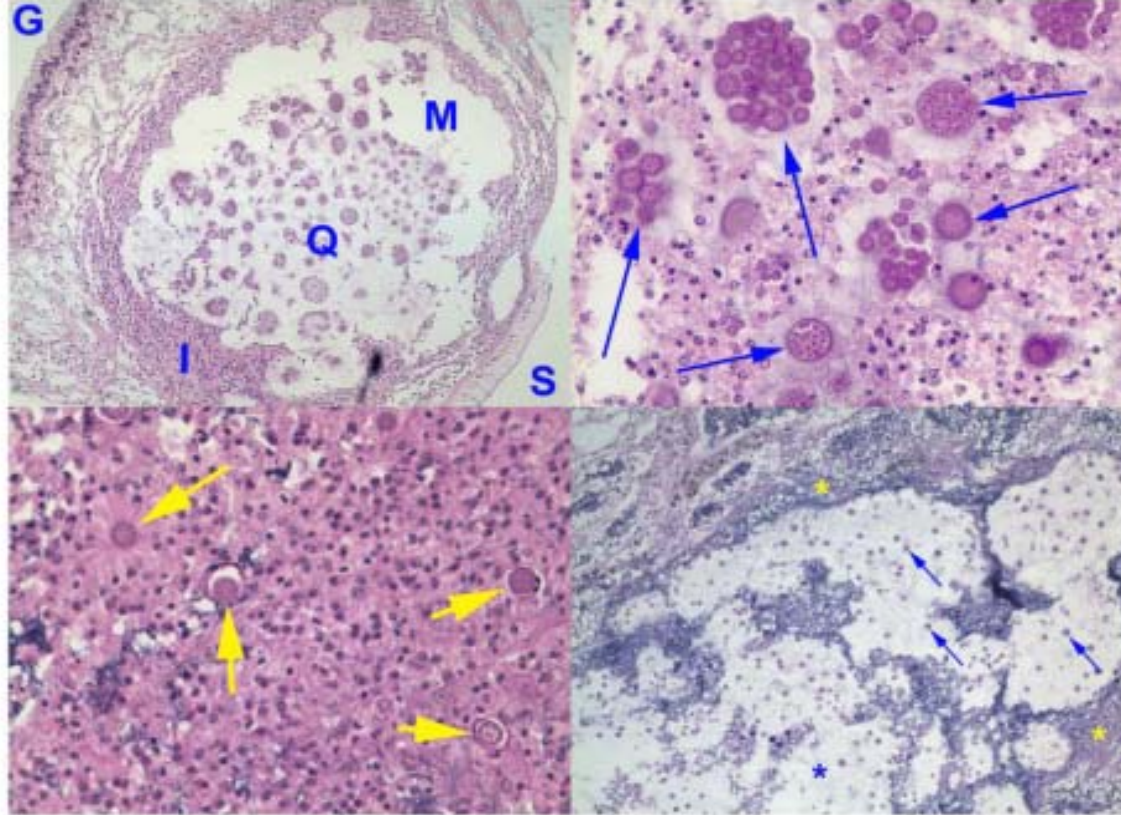


# Cleansing Cages





# Q P X

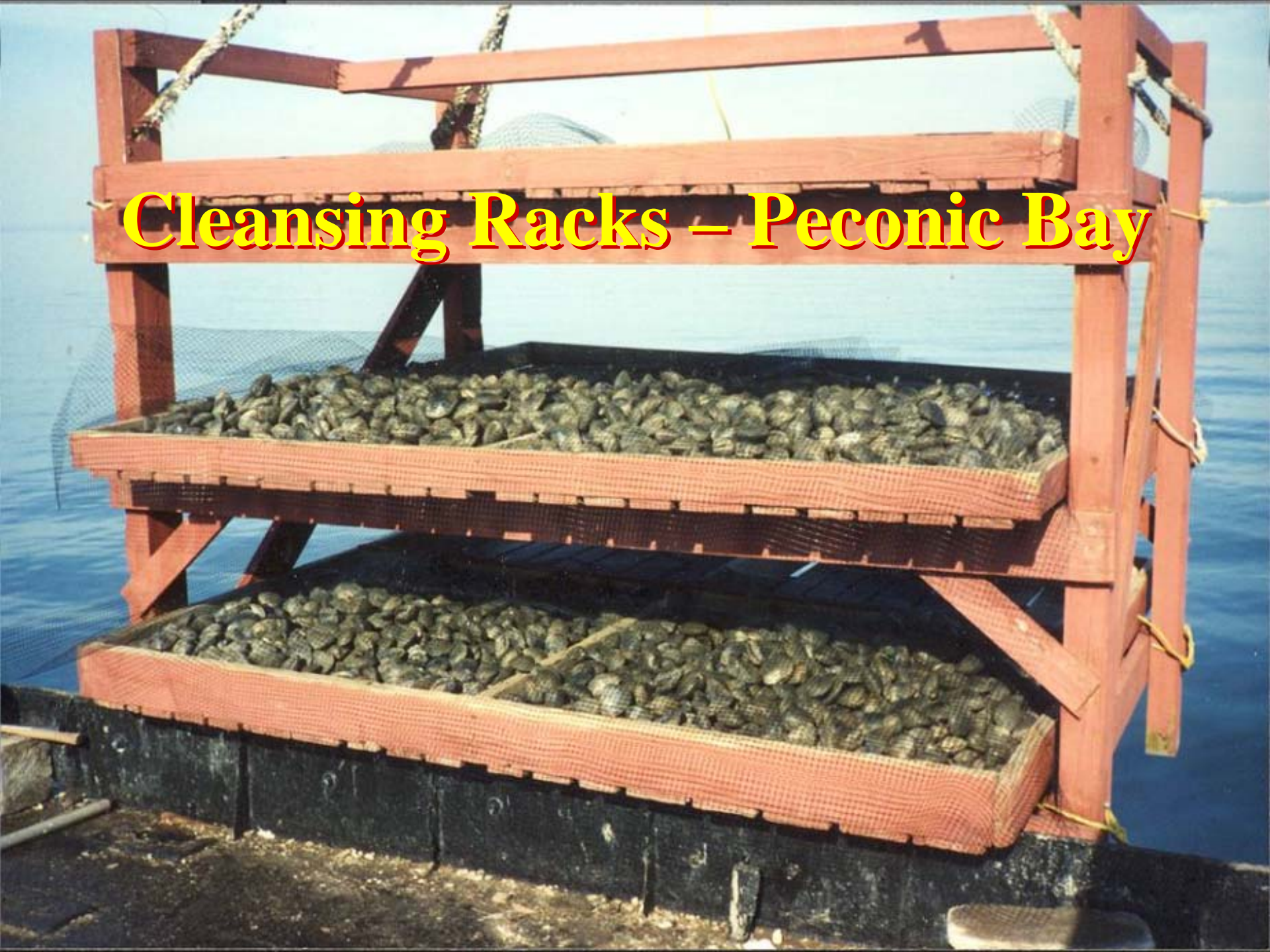


# Q P X

**Plate 1. QPX infections in clams from the Staten Island site.** Clockwise from top left. **TL:** Typical QPX lesion in the mantle of an infected clam. G = gill side epithelium; S = shell side epithelium; Q = QPX organisms in mucus envelopes; M = Mucus and shrinkage artifact; I = granulomatous inflammatory cells. **TR:** Higher power of QPX thalli and zoospore shizonts (blue arrows), interspersed with clam inflammatory haemocytes. **BR:** Large and complex visceral QPX in a male clam. Field shows large mucus-filled spaces (blue asterisk) with scattered thalli (blue arrows) and basophilic mucous material, also with peripheral inflammation (yellow asterisks). **BL:** Less mucous QPX lesion showing intense inflammation and direct contact of haemocytes with thalli (yellow arrows). In this case, the clam may be mounting an effective defence against the parasite.



# Cleansing Racks – Peconic Bay



# Atlantic Ocean Surfclam Fishery

- 501,290 bu harvested in 2002
- Survey conducted in 2002 in NY state Atlantic Ocean waters



- Results will be used to refine annual harvest limit, currently at 500,000 bu

# Long Island Sound Surfclam Fishery

- Revival of surfclam fishery since crash in late 1980's
- As of late April, 24,161 bu harvested, 50,000 bu limit



- Long Island Sound survey planned for summer 2003



<b>As of 4/15/03</b>	<b>CERTIFIED TO SEAS. CERTIFIED</b>	<b>CERTIFIED TO UNCERT.</b>	<b>SEAS. CERT. TO CERTIFIED</b>	<b>UNCERT. TO SEAS. CERTIFIED</b>
<b>AREA</b>	<b>Downgraded</b>	<b>Downgraded</b>	<b>Upgraded</b>	<b>Upgraded</b>
Moriches Bay (East)				480
Mount Sinai Harbor	77			
L I Sound (Wading River Creek)		18		
Northport Bay			140	
Saltair Marina* (Great South Bay)	2.3			
Lionhead Marina* (Hog Creek)	0.4			
New Suffolk* Marina	1.8			
Smith Cove* Marina			0.7	
<b>TOTAL</b>	<b>81.5</b>	<b>18</b>	<b>140.7</b>	<b>480</b>

**ACREAGE DOWNGRADED: - 99.5 acres**    \*Marina closures pending  
**ACREAGE UPGRADE: + 620.7 acres**    adoption of regulations  
**NET UPGRADING: + 521.2 acres**

# 2002 - 2003 15 Rainfall Conditional Programs



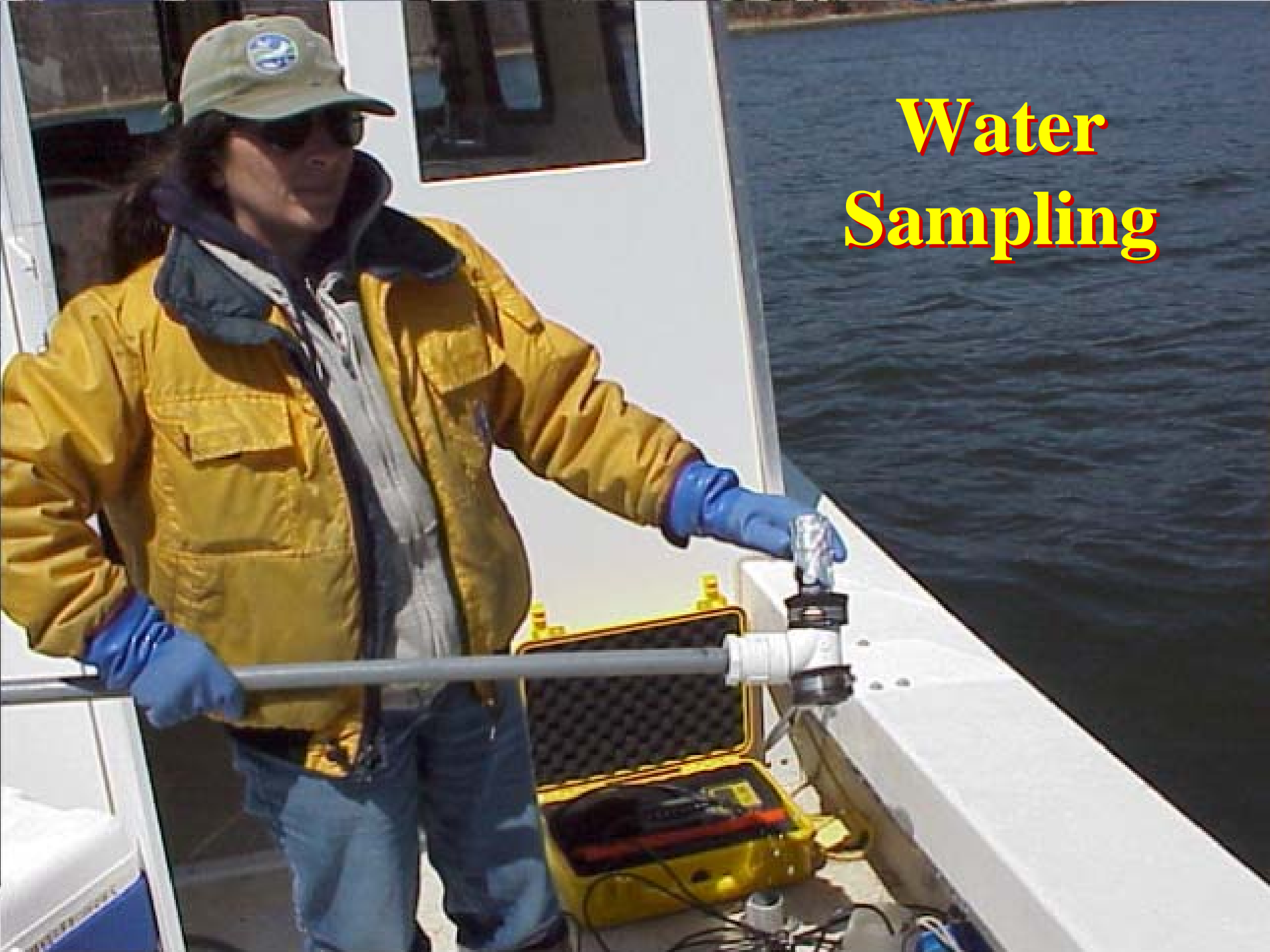




# Launching



# Water Sampling



## Water Sampling In 2002 & 2003 by NYSDEC Shellfisheries Section

2002	Growing Area Sampling Runs Done As Scheduled	Sampling Runs Cancelled	Sampling Runs Re-scheduled & Completed	Sampling Runs Cancelled But Not Made Up	Net Sampling Runs Completed	Number of Samples Collected
January	56	13	11	2	67	1077
February	50	14	8	6	58	878
March	57	10	5	5	62	1016
April	51	15	3	12	54	898
May	45	6	6	0	51	1027
June	63	6	6	0	69	1231
July	41	10	4	6	45	807
August	39	7	4	3	43	919
September	58	10	6	4	64	1010
October	56	10	4	6	60	1063
November	41	7	2	5	43	642
December	29	13	0	13	29	512
<b>2002 TOTALS</b>	<b>586</b>	<b>121</b>	<b>59</b>	<b>62</b>	<b>645</b>	<b>11080</b>
January 2003	21	27	3	24	24	361
February 2003	7	29	1	28	8	112
March 2003	51	19	10	9	61	1051
Jan.-March '03	89	74	14	61	93	1524
Jan.-March '02	163	37	24	13	187	2971



## A.7. - ESTIMATING THE NINETIETH PERCENTILE

The ISSC recently adopted a systematic random sampling strategy for evaluating shellfish growing waters that are not impacted by point source pollution. This method involves calculating the estimated 90<sup>th</sup> percentile. This guideline is provided to ensure uniformity in calculating the estimated 90<sup>th</sup> percentile.

### Background

At its annual meeting in 1989, the ISSC adopted a strategy of systematic random sampling for use in evaluating shellfish growing waters which are not influenced by point source discharges. The SSCA has the option to continue to use directed sampling to capture adverse pollution conditions or adopting the new strategy. When the SSCA elects to employ a systematic random sampling strategy to collect growing water samples, the following guideline shall be used to calculate the *estimated 90<sup>th</sup> percentile*. The method for calculating a 90<sup>th</sup> percentile for use in evaluating shellfish growing waters, was suggested by Mr. John Veazey, Georgia Department of Natural Resources, as an addendum to ISSC issue 8109<sup>1</sup>.

The public health concern is that while many waters may meet the NSSP median (or geometric mean) and percentage factor criteria, some shellfish growing water sampling stations still display a considerable level of variation in a distribution of sampling results. In such a situation, the risk to the shellfish consuming public has been a concern, since sampling data of this type may indicate that the shellfish growing waters are intermittently polluted.

The "10 percent above 43" criterion is not considered sufficient to protect public health when known meteorological or hydrological events, that occur intermittently, are shown to adversely affect growing water quality. The "percentage factor" was not intended to allow for variation in the data caused by changes in environmental conditions at the time of sampling. The "percentage factor" was intended for use with a data set collected under uniform conditions, and is intended to reflect the inherent variation of the MPN methodology<sup>2</sup>.

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<sup>1</sup> While issue 8109 suggested the use of the estimated 90<sup>th</sup> percentile for evaluating shellfish growing waters, it was intended to be used in association with a directed sampling strategy. The deliberations at the 1989 ISSC meeting resulted in the adoption of the estimated 90<sup>th</sup> percentile for use in evaluating data collected by a systematic random sampling program.

<sup>2</sup> The estimated 90<sup>th</sup> percentile is suitable for use **only** when the standard multi-tube MPN analysis is used, where either 3 or 5-tube, 3 dilution tests are used. See *Recommended Procedures for the Examination of Seawater and Shellfish*, 4<sup>th</sup> edition, APHA 1970.

Text of New York's Issue regarding sampling requirements for conditional and seasonal areas:

(iv) When the conditional management plan is based on the effects of non-point sources of pollution, such as rainfall events, stormwater runoff, and seasonal variations, a minimum of five (5) sets of water samples (when the Adverse Pollution Condition sampling regimen is used) or six (6) sets of water samples (when the Systematic Random Sampling regimen is used) are required. **As an alternative, monthly sampling may be used.** The samples shall be collected when the growing area is in the open status.

# Bacteriology Laboratory



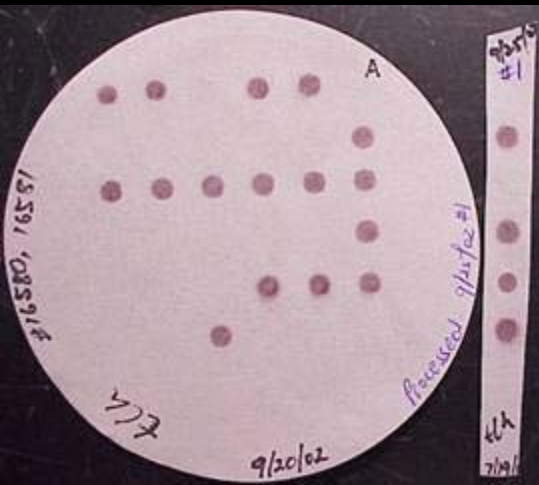
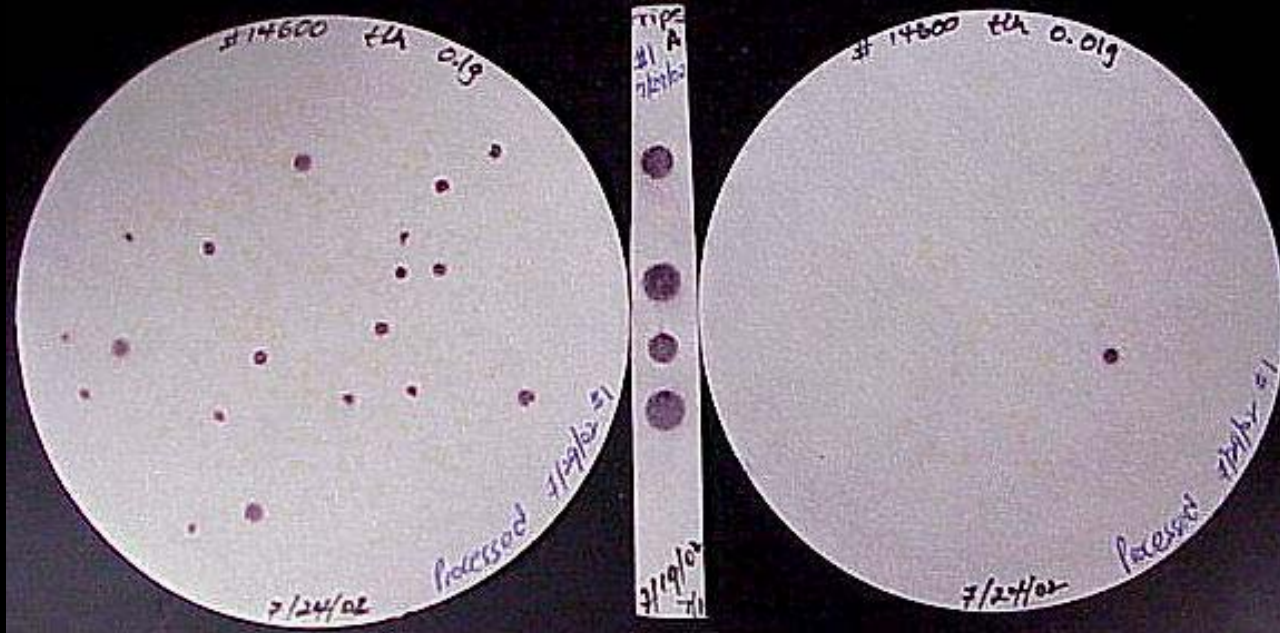


# The shellfish laboratory staff processed.....

- 11,763 growing area water & QA samples,
- 70 food samples for *Vibrio parahaemolyticus*,
- 63 food samples for fecal coliforms & aerobic plate counts for the inspection program,
- 40 dozen hard clam samples for QPX,
- 35 food samples for fecal coliforms for the transplant program, and
- 5 samples of oysters for Dermo in 2002.

# Direct Plating Procedure for total *Vibrio parahaemolyticus*

...since 1999

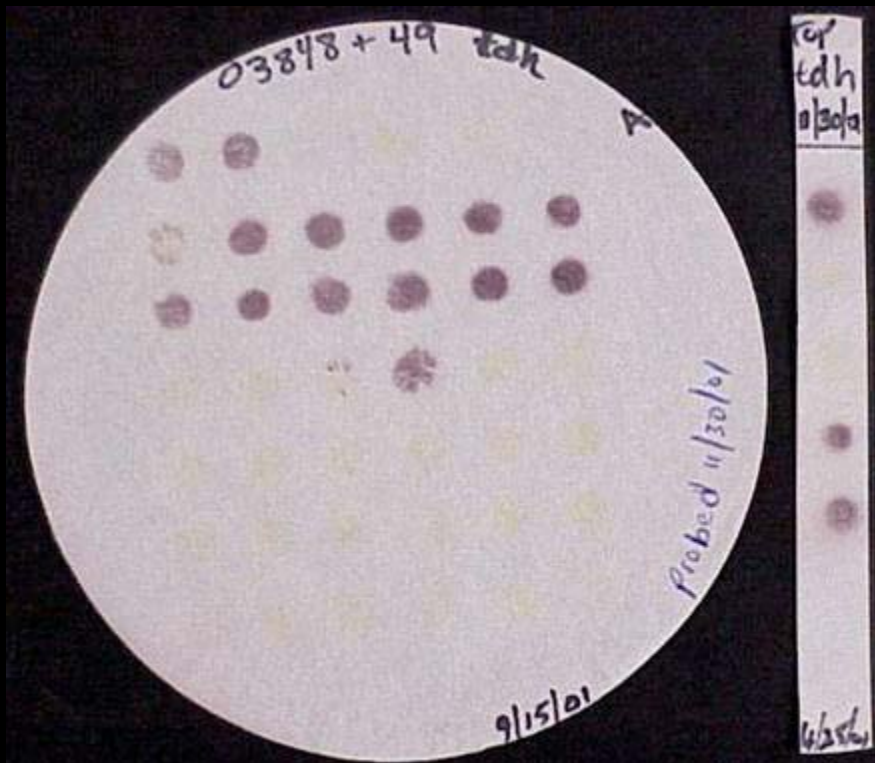


*tlh* positives in  
plating,  
enrichment &  
pure culture  
confirmation



and for  
pathogenic *Vibrio parahaemolyticus* -

*tdh* positives in the enrichment  
& pure culture confirmation





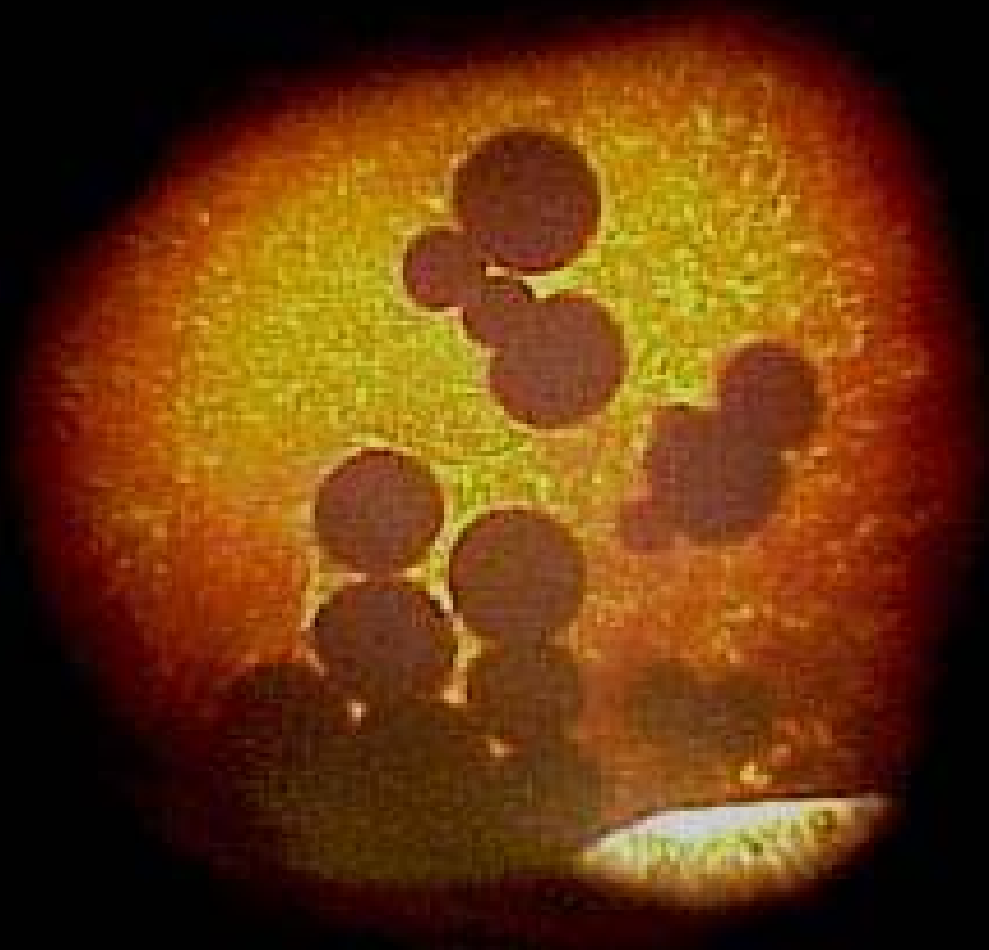
- New -  
**Phytoplankton  
Monitoring  
Program**





- New -

# Oyster Disease Monitoring Program for Dermo (*Perkinsus marinus*)



- New -

# QPX (Quahog Parasite Unknown)

Healthy

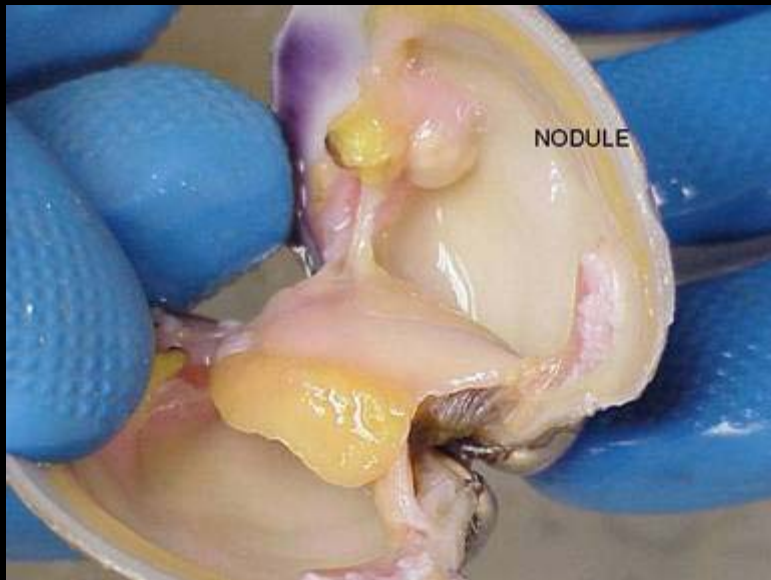


Hard Clam

Disease

Program


Diseased



Dying



# Staffing Changes

- 
- 1 - Food Inspector ..... retired ..... backfill date unknown**
  - 1 - Laboratory Technician ... vacant since 8/2001 ... position loss**
  - 1 - Laboratory Technician ... will vacate position 7/2003 ... backfill ?**
  - 1 - Biologist I ..... position will transfer out of the program**
  - 1 – F&W Technician (Boat Operator) ..... position will transfer out**



# SHELLFISH INSPECTION





# Illegal Imports From Foreign Nations Continues To Be A Significant Part Of The Inspections Unit Work Load





Excessively  
Dirty Oysters  
Originating  
In Another  
State Were  
Detected By  
Unit  
Inspectors

There Is A Revived Interest In The  
Surf Clam Fishery In Long Island  
Sound. Most Of These Clams Are  
Shipped To Out-Of-State Processors





# Farewell to Paul Chevallier

a.k.a. Uncle Paul





# The End



Prepared by  
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NESSA 2003